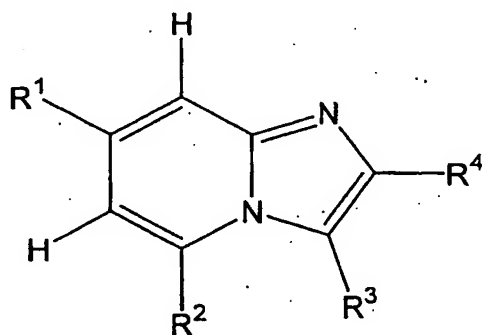


WHAT IS CLAIMED IS:

1. A method of inhibiting nitric oxide synthase in a mammal, said method comprising administering to said mammal an effective nitric oxide synthase inhibiting amount of at least one imidazo[1,2-a]-pyridine compound corresponding to formula I



I

wherein,

R<sup>1</sup> represents an unsubstituted or at least monosubstituted C<sub>1-8</sub>-alkyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkenyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkinyl radical, a C<sub>3-8</sub>-cycloalkyl radical, a C<sub>3-8</sub>-cycloalkyl radical which is bonded via a C<sub>1-8</sub>-alkylene group, an unsubstituted or at least monosubstituted aryl or heteroaryl radical, H, F, Cl, Br, I, CN, NO<sub>2</sub>, NH<sub>2</sub>, C(=O)R<sup>5</sup>, CO<sub>2</sub>H, CO<sub>2</sub>R<sup>6</sup>, OH or OR<sup>7</sup>;

R<sup>2</sup> represents an unsubstituted or at least monosubstituted C<sub>1-8</sub>-alkyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkenyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkinyl

radical, a C<sub>3-8</sub>-cycloalkyl radical, a C<sub>3-8</sub>-cycloalkyl radical which is bonded via a C<sub>1-8</sub>-alkylene group, an unsubstituted or at least monosubstituted aryl or heteroaryl radical, H, F, Cl, Br, I, CN, NO<sub>2</sub>, NH<sub>2</sub>, C(=O)R<sup>5</sup>, CO<sub>2</sub>H, CO<sub>2</sub>R<sup>6</sup> or OH;

- R<sup>3</sup> represents an unsubstituted or at least monosubstituted C<sub>1-8</sub>-alkyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkenyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkinyl radical, a C<sub>3-8</sub>-cycloalkyl radical, a C<sub>3-8</sub>-cycloalkyl radical which is bonded via a C<sub>1-8</sub>-alkylene group, an unsubstituted or at least monosubstituted aryl or heteroaryl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C<sub>1-8</sub>-alkylene group, CH<sub>2</sub>SR<sup>8</sup>, CH<sub>2</sub>OR<sup>8</sup> or H;
- R<sup>4</sup> represents H, an unsubstituted or at least monosubstituted C<sub>1-8</sub>-alkyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkenyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkinyl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical, or an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C<sub>1-8</sub>-alkylene group;
- R<sup>5</sup> represents an unsubstituted or at least monosubstituted C<sub>1-8</sub>-alkyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkenyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkinyl radical, a C<sub>3-8</sub>-cycloalkyl radical, a C<sub>3-8</sub>-cycloalkyl radical which is bonded via a C<sub>1-8</sub>-alkylene group, a C<sub>3-7</sub>-heterocyclyl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical

or an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C<sub>1-8</sub>-alkylene group;

- R<sup>6</sup> represents an unsubstituted or at least monosubstituted C<sub>1-8</sub>-alkyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkenyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkinyl radical, a C<sub>3-8</sub>-cycloalkyl radical, a C<sub>3-8</sub>-cycloalkyl radical which is bonded via a C<sub>1-8</sub>-alkylene group, an unsubstituted or at least monosubstituted aryl or heteroaryl radical or an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C<sub>1-8</sub>-alkylene group;
- R<sup>7</sup> represents an unsubstituted or at least monosubstituted C<sub>1-8</sub>-alkyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkenyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkinyl radical, a C<sub>3-8</sub>-cycloalkyl radical, a C<sub>3-8</sub>-cycloalkyl radical which is bonded via a C<sub>1-8</sub>-alkylene group, an unsubstituted or at least monosubstituted aryl or heteroaryl radical or an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C<sub>1-8</sub>-alkylene group; and
- R<sup>8</sup> represents an unsubstituted or at least monosubstituted C<sub>1-8</sub>-alkyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkenyl radical, an unsubstituted or at least monosubstituted C<sub>2-8</sub>-alkinyl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical which is bonded via a C<sub>1-8</sub>-alkylene group or a C<sub>3-8</sub>-cycloalkyl radical,

or a salt thereof with a physiologically acceptable acid.

2. A method according to claim 1, wherein said compound is present in the form of a free base.

3. A method according to claim 1, wherein  $R^1$  represents an unsubstituted or at least monosubstituted  $C_{1-8}$ -alkyl radical, F, Cl, Br, CN,  $NO_2$ ,  $NH_2$ ,  $C(=O)R^5$ ,  $CO_2H$ ,  $CO_2R^6$ , OH or  $OR^7$ .

4. A method according to claim 1, wherein  $R^1$  represents an unsubstituted or at least monosubstituted  $C_{1-8}$ -alkyl radical.

5. A method according to claim 1, wherein  $R^2$  represents H.

6. A method according to claim 1, wherein  $R^2$  represents an unsubstituted or at least monosubstituted  $C_{1-8}$ -alkyl radical.

7. A method according to claim 1, wherein  $R^3$  represents H.

8. A method according to claim 1, wherein  $R^3$  represents an unsubstituted or at least monosubstituted  $C_{1-8}$ -alkyl radical.

9. A method according to claim 1, wherein  $R^4$  represents H, an unsubstituted or at least monosubstituted  $C_{1-8}$ -alkyl radical, an unsubstituted or at least monosubstituted aryl or heteroaryl radical or an unsubstituted or at

least monosubstituted aryl or heteroaryl radical which is bonded via a C<sub>1-8</sub>-alkylene group.

10. A method according to claim 1, wherein R<sup>5</sup> represents an unsubstituted or at least monosubstituted C<sub>1-8</sub>-alkyl radical or an unsubstituted or at least monosubstituted aryl or heteroaryl radical.

11. A method according to claim 1, wherein R<sup>6</sup> represents an unsubstituted or at least monosubstituted C<sub>1-8</sub>-alkyl radical or an unsubstituted or at least monosubstituted aryl radical.

12. A method according to claim 1, wherein R<sup>7</sup> represents an unsubstituted or at least monosubstituted C<sub>1-8</sub>-alkyl radical or an unsubstituted or at least monosubstituted aryl radical.

13. A method according to claim 1, wherein R<sup>8</sup> represents an unsubstituted or at least monosubstituted C<sub>1-8</sub>-alkyl radical or an unsubstituted or at least monosubstituted aryl or heteroaryl radical.

14. A method according to claim 1, wherein said at least one imidazo[1,2-a]-pyridine compound is selected from the group consisting of  
2-(4-methoxy-phenyl)-7-methyl-imidazo[1,2-a]pyridine,  
2,7-dimethyl-imidazo[1,2-a]pyridine,  
7-methyl-imidazo[1,2-a]pyridine,  
2-tert-butyl-7-methyl-imidazo[1,2-a]pyridine, and  
salts of any of the foregoing with a physiologically acceptable acid.

15. A method according to claim 14, wherein said at least one imidazo[1,2-a]-pyridine compound is present in the form of a free base.

16. A method of treating a condition selected from the group consisting of migraine, septic shock, multiple sclerosis, Alzheimer's disease, inflammatory pain, diabetes, meningitis, or a wound in a mammal, said method comprising administering to said mammal an effective amount of a compound according to claim 1.

17. A method according to claim 16, wherein said condition is migraine.

18. A method according to claim 16, wherein said condition is septic shock.

19. A method according to claim 16, wherein said condition is multiple sclerosis.

20. A method according to claim 16, wherein said condition is Alzheimer's disease.

21. A method according to claim 16, wherein said condition is inflammatory pain.

22. A method according to claim 16, wherein said condition is diabetes.
23. A method according to claim 16, wherein said condition is meningitis.
24. A method according to claim 16, wherein said condition is a wound.